

### **REMARKS**

The application has been carefully reviewed in light of the Office Action dated June 27, 2005. Claims 1, 4, 10, 16 and 25 have been amended. Claims 1-26 remain pending in this case. Applicants reserve the right to pursue the original claims in this application and in other applications.

Claims 4, 10, and 16 have been objected to due to certain informalities. Claims 4, 10, and 16 have been amended to address the stated informalities and are believed to be in proper form. Applicants respectfully request that the objection be withdrawn.

Claims 13, 15 and 18 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicants regard as their invention. The Office Action states, claims 13, 15 and 18 belong to two statutory classes. Applicants respectfully disagree with rejection and request reconsideration.

Claims 13, 15 and 18 are all directed to a computer program product readable by a computer and encoding instructions for executing methods of the claimed invention. Claims 13, 15 and 18 are not representative two statutory classes, but are directed to a computer program having encoding instruction to perform a method. Thus, Applicants submit that these claims are not vague or indefinite.

A means plus function limitation is distinctly claimed if the description makes it clear that the means corresponds to well-defined structure of a computer or computer component implemented in either hardware or software and its associated hardware platform. *Atmel Corp. v. Information Storage Devices Inc.*, 198 F.3d 1374, 1380, 53 USPQ2d 1225, 1229 (Fed. Cir. 1999); *B. Braun Medical, Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424, 43 USPQ2d 1896, 1899 (Fed. Cir. 1997). Such means may be defined as:

- a programmed computer with a particular functionality implemented in hardware or hardware and software;
- a logic circuit or other component of a programmed computer that performs a series of specifically identified operations dictated by a computer program; or

-a computer memory encoded with executable instructions representing a computer program that can cause a computer to function in a particular fashion.

See MPEP § 2106 (V)(A)(2).

Applicants submit that claims 13, 15, and 18 should be associated with the third example recited in the above-referenced section of the MPEP. Accordingly, the rejection of claims 13, 15 and 18 should be withdrawn.

Claims 1-12, 14, 16, and 17 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Applicants respectfully disagree with the rejection and request reconsideration.

Claim 1-12, 14, 16, and 17 are directed to a method of scheduling employees and patients or scheduling employees in a health care environment. The Office Action states that these claims can be performed by a pencil and paper. Applicants submit that the criterion for sustaining this rejection is that the claimed invention produce a useful, concrete and tangible result. The result of claims 1-12, 14, 16 and 17 is a schedule which is a useful, concrete and tangible result.

For such subject matter to be statutory, the claimed process must be limited to a practical application of the abstract idea or mathematical algorithm in the technological arts. See *Alappat*, 33 F.3d at 1543, 31 USPQ2d at 1556-57 (quoting *Diamond v. Diehr*, 450 U.S. at 192, 209 USPQ at 10). See also *Alappat* 33 F.3d at 1569, 31 USPQ2d at 1578-79 (Newman, J., concurring) (“unpatentability of the principle does not defeat patentability of its practical applications”) (citing *O'Reilly v. Morse*, 56 U.S. (15 How.) at 114-19). A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. See *AT&T*, 172 F.3d at 1358, 50 USPQ2d at 1452.

See MPEP § 2106(B)(2)(b)(ii).

Since the claimed invention produces something that is concrete, tangible and useful, a schedule, the claimed invention is limited to a practical application in the technological arts and

is therefore patentable subject matter. Accordingly, the rejection of claims 1-12, 14, 16, and 17 should be withdrawn.

Claims 1-4, 6, 7, 9-13, 15-21 and 25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hirsch et al. (WO 97/25682). Applicants respectfully traverse the rejection and request reconsideration.

Amended claim 1 recites a method of scheduling a plurality of patients and a plurality of employees in a health care environment, wherein at least two patients receive treatment during a predetermined time period, said scheduling method comprising, *inter alia*, for each patient, evaluating patient care requirements, wherein the patient care requirements correspond to actual employee time requirements necessary to satisfy the patient care requirements and wherein the evaluating patient care requirements include whether such patient care requirements are temporary or permanent.

Claim 16 recites a method of scheduling employees in a health care environment comprising, *inter alia*, calculating scheduling efficiency information relating to a generated schedule of patients and employees based on the patient profiles and employee profiles and adjusting the schedule to generate a more efficient schedule.

Claim 19 recites a system for scheduling employees in a health care environment comprising, *inter alia*, a memory store for storing patient information related to the needs of a plurality of patients, resource information and employee information related to patient care capability of a plurality of patients and a scheduling module that schedules patients and employees according to patient needs.

Amended claim 25 recites a graphical user interface for a computer system, the graphical user interface having a display module for displaying information; said graphical user interface comprising, *inter alia*, a calculation display area for displaying calculated values within each interval, the calculated values relating to temporary or permanent patient care requirements and

employee capabilities for each interval whereby the calculation display area provides efficiency information.

Hirsch discloses a system which having dedicated management and operational software for the OR suites (including PACU, ICU, etc.) that adaptively and intelligently schedules and optimizes the utilization of the OR suite resources (including resource time, operating rooms, staff, inventory, etc.) and minimizes the costs involved in running the OR suites. See Hirsch page 7, lines 26-30. The system of Hirsch includes an optimization engine conducts a two-phase optimal scheduling. The first phase is a feasibility check which allows for an immediate confirmation that each surgeon's cases are booked and all relevant preferences are met successfully. The second phase is an optimal global optimization which is activated 48 hours or 72 hours (depending on the hospital's policy) before the day of surgery. The optimal global optimization is done by associating a cost function to every feasible schedule and then trying to find a schedule with minimal cost. The result of the global optimization is a bona fide, mathematically provable optimal schedule(s) according to the chosen criteria of the hospital. At first, the resulting schedules produced drive the staff scheduling and inventory control modules of the system. See Hirsch page 11, line 28 through page 12 line 9.

Hirsch fails to teach or suggest all the limitations of claims 1, 16, 19 and 25. Regarding claim 1, Hirsch fails to teach or suggest evaluating patient care requirements, wherein the patient care requirements correspond to actual employee time requirements necessary to satisfy the patient care requirements and wherein the evaluating patient care requirements include whether such patient care requirements are temporary or permanent. Accordingly, the rejection of claim 1 should be withdrawn.

Regarding claim 16, Hirsch fails to teach or suggest calculating scheduling efficiency information relating to a generated schedule of patients and employees based on the patient profiles and employee profiles and adjusting the schedule to generate a more efficient schedule.

To the contrary, Hirsch merely confirms the booking of each surgeon's case and optimizes the list of bookings based on cost, not a schedule of patients and employees based on the patient profiles and employee profiles. Accordingly, the rejection of claim 16 should be withdrawn.

Hirsch fails to teach or suggest all the limitations of claim 19. Specifically, Hirsch fails to teach or suggest a scheduling module that schedules patients and employees according to patient needs. As mentioned above, Hirsch optimizes bookings scheduled by doctors according to incurred cost by the hospital. Accordingly, the rejection of claim 19 should be withdrawn.

Hirsch fails to teach or suggest all the limitations of claim 25. Specifically, Hirsch fails to teach or suggest a calculation display area for displaying calculated values within each interval, the calculated values relating to temporary or permanent patient care requirements and employee capabilities for each interval whereby the calculation display area provides efficiency information. To the contrary, Hirsch provides no display of calculated values relating to temporary or permanent patient care requirements and employee capabilities for each interval. Accordingly, the rejection of claim 25 should be withdrawn.

Claims 2-15 depend directly or indirectly from claim 1; claims 17 and 18 depend directly from claim 16; claims 20-24 depend directly or indirectly from claim 19; and claim 26 depends directly from claim 25, and are allowable along with claims 1, 16, 19 and 25, respectively, for the reasons mentioned above and on their own merit.

Claims 5, 8, 14, 22-24 and 26 stand rejected under 35 U.S.C. §103 as being unpatentable over Hirsch in view of Rosse (U.S. Patent No. 6,640,212). Applicants respectfully traverse the rejection and requests reconsideration.

Claims 5, 8, and 14 depend from claim 1; claims 22-24 depend from claim 19; and claim 26 depends from claim 25. As mentioned above, claims 1, 19 and 25 are allowable over Hirsch. Therefore, claims 5, 8, 14, 22-24 and 26 are allowable over Hirsch.

Rosse discloses a standardized information management system for use in long-term residence facilities that continually collects and manages all information related to both the clients and staff of the facility. See Rosse column 2, lines 23-26. The system of Rosse accounts for non-client duties associated with a staff member. See Rosse column 8, lines 11-15.

The Office Action fails to establish a *prima facie* case of obviousness for the subject matter of claims 1, 16, 19 and 25. Courts have generally recognized that a showing of a *prima facie* case of obviousness necessitates three requirements: (i) some suggestion or motivation, whether in the references themselves or in the knowledge of a person of ordinary skill in the art to modify the reference or combine the reference teachings; (ii) a reasonable expectation of success; and (iii) the prior art references must teach or suggest all claim limitations. See e.g., In re Dembiczak, 175 F.3d 994 (Fed. Cir 1999); In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998); Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573 (Fed. Cir. 1996). The references used in the Office Action fail at least the third prong of obviousness in that the prior art references do not teach or suggest all claim limitations.

In the present case, Rosse also fails to teach or suggest all the subject matter of claim 1. Specifically, Rosse fails to teach or suggest evaluating patient care requirements, wherein the patient care requirements correspond to actual employee time requirements necessary to satisfy the patient care requirements and wherein the evaluating patient care requirements include whether such patient care requirements are temporary or permanent. Accordingly, claim 1 is allowable over Rosse.

Rosse also fails to teach or suggest all the subject matter of claim 16. Specifically, Rosse fails to teach or suggest calculating scheduling efficiency information relating to a generated schedule of patients and employees based on the patient profiles and employee profiles and adjusting the schedule to generate a more efficient schedule. Accordingly, claim 16 is allowable over Rosse.

Rosse also fails to teach or suggest all the subject matter of claim 19. Specifically, Rosse fails to teach or suggest adjusting a schedule to generate a more efficient schedule. Accordingly, claim 19 is allowable over Rosse.

Rosse also fails to teach or suggest all the subject matter of claim 25. Specifically, Rosse fails to teach or suggest a calculation display area for displaying calculated values within each interval, the calculated values relating to temporary or permanent patient care requirements and employee capabilities for each interval whereby the calculation display area provides efficiency information. Accordingly, claim 25 is allowable over Rosse.

Thus, Hirsch and Rosse whether considered alone or in combination fail to teach or suggest all the limitations of claims 1, 16, 19 and 25. Accordingly, claims 1, 16, 19 and 25 are allowable over Hirsch and Rosse, or a combination thereof. Claims 5, 8, and 14 depend from claim 1; claims 22-24 depend from claim 19; and claim 26 depends from claim 25, and are allowable along with claims 1, 19 and 25, respectively, for the reasons mentioned above and on their own merit.

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Amdt. dated March 22, 2006  
Reply to Office Action of June 27, 2005  
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### CONCLUSION


A request for a one-month extension of time is requested for the period of September 27, 2005 through October 27, 2005, and is submitted with this amendment.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned please contact Applicants' undersigned attorney at 303.357.1648.

Respectfully submitted,

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